

## ABSTRACT OF THE DISCLOSURE

There is provided a supplemental channel assigning apparatus and method in a mobile communication system. In the supplemental channel  
5 assigning method, a mobile station receives a plurality of supplemental channel assignment messages successively from a base station on an existing traffic channel, each of the channel assignment messages having the fields of a start time, a duration, a sequence number for message identification, and a channel identifier for channel identification, and stores the received channel assignment  
10 messages in a memory according to the durations and sequence numbers of the channel assignment messages. The mobile station then conducts data communication on a channel corresponding to the channel identifier of a first read channel assignment message for a period between the start time and the end of the duration set in the read channel assignment message and then on a channel  
15 corresponding to the channel identifier of a next read channel assignment message for a period between the start time and the end of the duration set in the next channel assignment message, the start time of the next channel assignment message being set to or after the end of the data communication according to the first read channel assignment message.